### SHAPING THE FIELD: A REVIEW OF THE USE OF THEORY IN RESEARCH ON RESEARCH INTEGRITY

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# THE BACKGROUND

The study is part of a larger project – **ETHOS** (Exploring Reseach Integrity Practicies in the Houses of Science)

- Previous studies have indicated that the problem is often (by researchers as well as leaders) seen to be in "the system", but solutions in "the culture"
  - How is responsibility framed and placed both in the literature and in policies? How does the translation of problems/solution location affect academic practices?
  - How academics themselves talk about responsibility and integrity in their daily work?

Central research question: How do the academic and public discourses shape the problem of research integrity and how do such problematizations affect academic practices and perceptions?



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# BACKGROUND

An early look at the literature for the ETHOS project

- An emerging field?
  - More or less dedicated journals
  - Dedicated conferences
  - But still some fragmentation...
  - Researchers with many different disciplinary backgrounds
  - Disciplinary norms and traditions still strong
  - Few institutionally embedded environments





# **RESEARCH AIM**

• To explore the role of theory/theories in this emerging field

- Why theory?
  - Theories are what guides our approaches to studying the world, and in this case research integrity
  - It provides us with lenses through which we see the world and thereby also our findings
  - Our assumption?
    - That the field of research integrity has been mainly(?) non-theoretical
    - Lack of theoretical consensus?

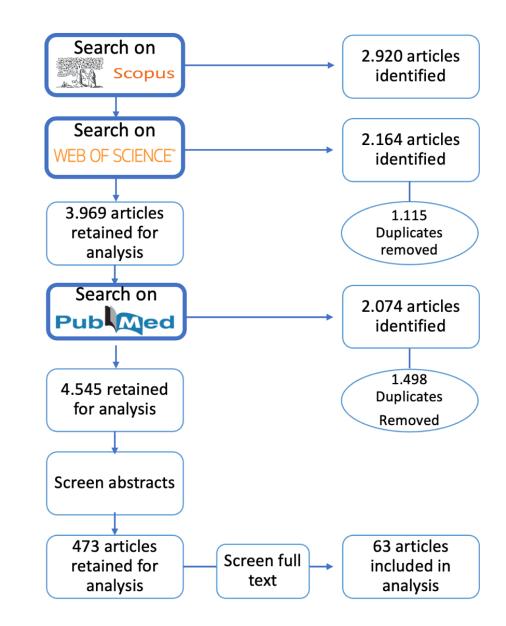






# METHODS

- Systematic searches of SCOPUS, PubMed, and Web of Science databases for English-language articles published between 2010 and 2023, based on a pre-defined set of search terms (that include: research, academic, and scientific integrity, research and scientific misconduct, good and questionable research practices)
- Initial pool of 4555 publications specific focus on 560 articles, focused on research integrity and scientific misconduct.





5 JUNE 2024 LISE DEGN 5 JUNE 2024 ASSOCIATE PROFESSOR



#### Thematic variation

- 3 main clusters
- 3 overlapping themes
- Many subthemes, but also overall somewhat consensus on the questions that are asked

#### **Research integrity**

Practices (and cultures) of research integrity; research integrity promotion; good scientific conduct and publicity; peer review; validity of clinical trials; policy and institutional discourses on research integrity (transition from ELSA to RRI); reporting bias; use and validity of indigenous methodologies in qualitative health research; scientific research mistakes and cognitive bias

Co-

authorship

Retractions

Replication

#### Research

#### misconduct

Perceived pressure to publish; academic plagiarism in fiction; likelihood and factors prompting research misconduct; sanctions; causes and consequences of misconduct; reporting research misconduct; organizational response to academic misconduct; fraud case studies; misconduct in collaborative projects; criminalization of research misconduct; scientific misconduct and researchers' personality traits

#### Questionable research practices

Individual manifestations of QRP's; QRP's and publication bias; (financial) conflicts of interest; exploitative supervision; publication pressure



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So what about theory?

- We roughly see three variations of theory-use
  - 1. use of one or several theories/theoretic approaches stated explicitly within the discussion of the research design and consistently carried out within the analytical part of a given study
  - 2. a theorization carried out alongside the analysis and discussion
  - 3. an operationalization of one or several concepts linked to a theoretical framework not fully engaged in the study, but operationalized to functionally guide the analytic work carried out in the study.
  - And a final group, claiming to use theory (in intro or conclusion), but with no reference to that use in the paper







#### What theories are used?

- a very diverse picture emerges
- To some extent the field is dominated by grounded theory, personality phsychology and various
  "institutionalisms"/org anisational theory, but also a myriad of other perspectives

#### **Research integrity**

Self-determination theory, Social epistemology theory, Social practice theory and cultural theory, Social exchange theory, Psychoanalysis (Freud, Lacan), organizational justice theory, open systems theory, organizational theory, new institutional theory, actor network theory, Bourdeusian sociology, post-colonial theory, dual-process theory

#### **Research misconduct**

Lacanian psychoanalysis, Foucauldian theory, Rational choice theory, Criminological and deviance theories, Rotten Apple Theory' of misconduct, 'Stressful theory' / 'Imperfect environment theory', Corruption theory, Nationalism and political identity, gender theories, ressource dependence theory, theory of social power, post-colonialism theory, discourse analysis, organisational justice theory, game theory, theory of sensemaking; General strain theory; Organisational culture theories, Cultural theory of punishment

#### Questionable research practices

Foucauldian theory, Neo-institutional theory, Personality psychology (goal standard model, dark triade), Personality psychology (personality traits), Social identy and social representation theory, Behavioral biology/Psychology, economic theory, Gender theory, Bad apple theory of misconduct, General strain theory, Organisational culture theories



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The work is still ongoing, but next steps include:

- exploring thematic clusters addressing same, similar or compatible issue(s), and analyze the role of theory, its variation and contribution to informing the logic of inquiry carried out across the selected studies
- trace patterns in theory application

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# **CONCLUDING REMARKS**

The aim was to look at how academic discourses shape "the problem" of research integrity through looking at how theory is used

- What have we learned?
  - We approach the "problem" very differently a range of different theoretical lenses or "logical propositions that posit causal relationships attempting to explain observable, naturally occurring phenomena" (Świątkowski and Dompnier, 2017, p.116).
  - Is this bad? Probably not, but worth considering for an emerging field
  - Theory building is difficult with so different starting points
  - What about the remaining 400+ articles not using theory at all?





# THANK YOU

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